Project WILD

Alignment with Maryland Voluntary State Curriculum – High School[i]

Activity	Government/History	Science	AP Environmental Science
OH DEER! **PAGE 36, GRADE 5-8+** STUDENTS WILL IDENTIFY AND DESCRIBE FOOD, WATER, AND SHELTER AS THREE ESSENTIAL COMPONENETS OF HABITAT; DESCRIBE THE IMPORTANCE OF GOOD HABITAT FOR ANIMALS; DEFINE "LIMITING FACTORS" AND GIVE EXAMPLES; AND RECOGNIZE THAT SOME FLUCTUATIONS IN WILDLIFE POPULSTIONS ARE NATURAL AS ECOLOGICAL SYSTEMS UNDERGO CONSTANT CHANGE.	[potential exists to meet **Government: 1.0 Political Science - A. The Foundations & Functions of Government: 3.** Governmental roles & policies regarding public issues (1.1.3). b. (environmental issues); e. (environmental policy); **C. Protecting Rights & Maintaining Order: 3**. Impact of government decisions & actions (1.2.3). e. (MD Dept. of Environment regulations); **D. Modifying the Environment 1.** Role of government in addressing land use & other environmental issues (3.1.2). a-e; **Government**: **4.0 Economics - A. Scarcity & Economic Decision-making. 1.** Economic costs & benefits & opportunity costs (4.1.2). d. (public policy issues, such as environmental concerns)].	**Goal 1 Skills & Processes** **Goal 3 Biology: 3.5** Interdependence of diverse living organisms & their interactions with the biosphere (relationships between biotic & abiotic factors; interrelationships & interdependencies among different organisms; natural & man-made changes in environmental conditions affect individuals & population dynamics; human activity & technology influences food webs); **3.4** Explain evolutionary change (natural selection; environmental pressures); **3.6** Investigate a biological issue (consequences & trade-offs between technology & environment; defend their position on biodiversity, population growth, global sustainability, etc.). **Goal 6: 6.0 Environmental Science: Interdependence of Organisms: 6.12.2** Why interrelationships & interdependencies of organisms contribute to the dynamics of ecosystems (CLG 6.2.2); Conclude that populations grow or decline due to a variety of factors (CLG 6.2.3); **6.5.3** Identify the survival needs & interactions between organisms & the environment; **Natural Resources and Human Needs: 6.12.4** Evaluate the interrelationships between humans & biological resources (CLG 6.3.4); [potential exists to meet **Environmental Issues: 6.5.5** Decisions influencing the environment may have benefits, drawbacks, and unexpected consequences no matter how carefully the decisions are made; **6.8.5** Human activities can accelerate or magnify many naturally occurring changes (i.e., erosion, air and water quality, populations). (MLO 6.2)].	**II. The Living World: A. Ecosystem Structure** (biological populations & communities; ecological niches; interactions among species); **III. Population: A. Population Biology Concepts** (population ecology; carrying capacity; survivorship); [potential exists to meet **VII. Global Change: C. Loss of Biodiversity** 1. habitat loss; introduced, endangered & extinct species; 2. maintenance through conservation; 3. relevant laws & treaties.]

Activity	Government/History	Science	Advanced Placement Environmental Science
HAZARDOUS LINKS, POSSIBLE SOLUTIONS **PAGE 326, GRADE 7-8+** STUDENTS WILL GIVE EXAMPLES OF WAYS IN WHICH PESTICIDES ENTER FOOD CHAINS; DESCRIBE POSSIBLE CONSEQUENCES OF PESTICIDES ENTERING FOOD CHAINS, AND DESCRIBE HOW REGULATIONS ATTEMPT TO CONTROL PESTICIDE USE.	[potential exists to meet **Government: 1.0 Political Science - A. The Foundations & Functions of Government: 3.** Roles & policies re: public issues (1.1.3). a. (EPA); b. (environmental issues); e. (environmental policy); **B. Economic Systems & the Role of Government in the Economy.** 3. Regulatory agencies & their social, economic, & political impacts (e.g. EPA) (4.1.3); **C. Protecting Rights & Maintaining Order: 3**. Impact of gov. decisions & actions (1.2.3). e. (EPA environmental standards; Md Dept. of Envir. regulations); **D. Modifying the Environment 1.** Role of gov. in addressing land use & other environmental issues; (3.1.2). a-e; **Government**: **4.0 Economics - A. Scarcity & Economic Decision-making. 1.** Economic costs & benefits & opportunity costs (4.1.2). d. (public policy issues, such as environmental concerns); **History: 5.2** (Clean Water Act; EPA regulations]	**Goal 1 Skills & Processes** **Goal 3 Biology: 3.2** Cells exist in a narrow range of environ. conditions & changes in metabolic activity (toxic substances); **3.4** Mechanism of evolutionary change (natural selection; environ. pressures); **3.5** Interdependence of living organisms & their interactions w/biosphere (relationships betw. biotic & abiotic factors; interrelationships & interdependencies among organisms; natural & man-made changes affect individuals & pop. dynamics; human activity & technology influence food webs); **3.6** Investigate a biological issue (consequences & trade-offs of technology; defend a position (e.g., biodiversity, population growth, global sustainability). **Goal 4 Chemistry: 4.5** Chemistry's impact on society (food additives; hazardous waste disposal; synthetics). **Goal 6.0 Environmental Science: Interdependence of Organisms: 6.12.2** Organisms are linked by the transfer and transformation of matter and energy at the ecosystem level (CLG 6.2.1); interrelationships & interdependencies of organisms contribute to the dynamics of ecosystems (CLG 6.2.2); pops. grow/decline due to a variety of factors (CLG 6.2.3); **Natural Resources & Human Needs: 6.12.4** impacts of human activities are both positive (recycling) & negative (toxic wastes); interrelationships between: humans & water quality (CLG 6.3.2); humans & biological resources (CLG 6.3.4); **Environmental Issues: 6.3.5** Using the environment has consequences; **6.5.5** Decisions influencing the environ. may have benefits, drawbacks, & unexpected consequences no matter how carefully decisions are made; **6.8.5** Human activities can accelerate or magnify many naturally occurring changes (MLO 6.2).	**II. The Living World: A. Ecosystem Structure** (biological populations & communities; interactions among species); B. **Energy Flow (**food webs & trophic levels; ecological pyramids); **III. Population: A. Population Biology Concepts** (population ecology; carrying capacity; survivorship); **IV. Land & Water Use: A Agriculture 2. Controlling pests** (costs/ benefits of pesticide use; relevant laws); **VI. Pollution: A. Pollution Types 3**. Water pollution (types; sources, causes & effects; relevant laws); **B. Impacts on the Environment & Human Needs 2.** Hazardous chemicals in the environment (biomagnification). [potential exists to meet **VII. Global Change: C. Loss of Biodiversity** 1. Habitat loss; introduced, endangered & extinct species; 2. Conservation; 3. Laws & treaties.]

Alignment with Maryland Voluntary State Curriculum – High School[i]

Activity	Government/History	Science	Advanced Placement Environmental Science
SEA TURTLES INTERNATIONAL **PAGE 98, GRADES 9-12** STUDENTS WILL ANALYZE POLICIES AND PHILOSOPHIES THAT COUNTRIES HAVE RELATING TO WILDLIFE OWNERSHIP, PROTECTION & HABITAT MANAGEMENT; EXPLAIN THE IMPORTANCE OF INTERNATIONAL AGREEMENTS AND ORGANIZATIONS THAT MANAGE SPECIES THAT CROSS NATIONAL BOUNDARIES; AND DEFINE THE DIFFERENCE BETWEEN OWNERSHIP OF LAND AND OWNERSHIP OF WILDLIFE.	**Government** **1.0 Political Science: A. The Foundations & Functions of Government: 3.** Gov. roles & policies on public issues (1.1.3). a. (EPA); b. (environmental issues); e. (environmental policy); **C. Protecting Rights & Maintaining Order: 3**. Impact of gov. decisions & actions (1.2.3). e. (environmental standards set by the EPA; Md Dept. of Environment regulations); **D. Modifying the Environment 1.** Role of gov. in addressing land use & other environmental issues (3.1.2). a-e; **3.0 Geography: B. Geographic Characteristics of Places & Regions.** 1. Roles & relationships of regions on formation & implementation of gov. policy (3.1.3). (population growth & impacts on environment; how natural resources & population define a region). c. how regional natural resources & environmental issues influence gov. policies; **C. Movement of People, Goods & Ideas**. 1. How demographics relate to political participants, public policy & gov. policies (3.1.1). d. population trends & projections & how they affect the environment**;** **4.0 Economics: A. Scarcity & Economic Decision-making. 1.** Economic costs & benefits & opportunity costs (4.1.2). d. (public policy issues, such as environmental concerns); **B. Economic Systems & the Role of Government in the Economy.** 3. Regulatory agencies & their social, economic, & political impacts (4.1.3). (e.g., EPA); **U.S. History 5.2** (Clean Water Act; regulations set by the EPA]. **U.S. History: 5.2** Unterstanding of political, economic & cultural developments from 1964-1980. Political Science (endangered species act);	**Goal 1 Skills & Processes** **Goal 3 Biology - 3.5** natural & man-made changes in environmental conditions affect individuals & dynamics of populations; food webs are influenced by human activity & technology); **3.6** Investigate a biological issue (consequences & trade-offs between technology & the environment; defend their position (e.g., biodiversity, population growth, global sustainability). **Goal 6: 6.0 Natural Resources and Human Needs: 6.12.4** Evaluate the interrelationships between humans and biological resources (CLG 6.3.4); **Environmental Issues: 6.3.5** Using the environment to meet one's wants & needs has consequences (i.e., pollution, extinction); **6.5.5** Decisions influencing the environment may have benefits, drawbacks, and unexpected consequences no matter how carefully the decisions are made; **6.8.5** Human activities can accelerate or magnify many naturally occurring changes (i.e., populations); (MLO 6.2); **6.12.5** (with activity extension) The student will identify an environmental issue and formulate related research questions (CLG 6.4.1); Design & conduct research (CLG 6.4.2); Interpret findings to form conclusions and make recommendations to help resolve the issue (CLG 6.4.3).	**II. The Living World: A. Ecosystem Structure** (biological populations & communities); **C. Ecosystem Diversity** (biodiversity; ecosystem systems). **IV. Land & Water Use: A Agriculture: F. Fishing** (fishing techniques; overfishing; aquaculture; relevant laws & treaties); **G. Global Economics** (globalization; World Bank; Tragedy of the Commons; relevant laws & treaties). **VII. Global Change: C. Loss of Biodiversity** 1. Habitat loss; overuse; pollution; introduced, endangered & extinct species; 2. Maintenance through conservation; 3. Relevant laws & treaties.

Project Wild - Aquatic	Alignment with Maryland Voluntary State Curriculum – High School[i]		
Activity	**Government/History**	**Science**	**Advanced Placement Environmental Science**
FASHION A FISH PAGE 56, GRADES 3+ STUDENTS WILL DESCRIBE ADAPTATIONS OF FISH TO THEIR ENVIRONMENT, HOW ADAPTATIONS HELP FISH SURVIVE IN THEIR HABITATS, AND INTERPRET THE IMPORTANCE OF ADAPTATIONS IN ANIMALS. **NOTE**: THIS ACTIVITY CAN INVOLVE ART.	None	[potential exists to meet **Goal 3 Biology - 3.5** Investigate the interdependence of diverse living organisms & their interactions with the biosphere (relationships between biotic & abiotic factors; interrelationships & interdependencies among different organisms; natural & man-made changes in environmental conditions affect individuals & dynamics of populations; food webs are influenced by human activity & technology); **3.4** Explain the mechanism of evolutionary change (natural selection; environmental pressures); **3.6** Investigate a biological issue (consequences & trade-offs between technology & the environment; defend their position (e.g., biodiversity)].	**II. The Living World A. Ecosystem Structure** (ecological niches).

[i] Activities meet standards as noted. When a standard is listed without notation, the activity meets the standard fully for all applicable grades for that activity.